

Claims

1. A lamp (10) having a base at one or two ends, a bulb element (11) which essentially envelops a physical volume (14) being arranged on the at least one base (12), and the lamp having at least one associated LED element (13), characterized in that the LED light is irradiated into the bulb element, and, owing to reflection, in particular total reflection, at the limit faces (16, 17) of the bulb element, the LED light is passed on within the bulb element.

2. The lamp as claimed in claim 1, characterized in that a lamp element (31) of the second type is arranged within the physical volume (14).

3. The lamp as claimed in claim 2, characterized in that the lamp element (31) of the second type is in the form of a compact fluorescent lamp.

4. The lamp as claimed in one of claims 1 to 3, characterized in that a lamp element (31) of the second type is provided which has essentially the same color temperature as the LED element (13).

5. The lamp as claimed in one of the preceding claims, characterized in that the bulb element (11) has exclusively curved limit faces (16, 17) which have largely no edges.

6. The lamp as claimed in one of the preceding claims, characterized in that the bulb element (11) has openings, in particular ventilation openings.

7. The lamp as claimed in one of claims 1 to 5, characterized in that the physical volume (14) is completely enclosed jointly by the bulb element (11) and the at least one base (12).

8. The lamp as claimed in one of the preceding claims, characterized in that at least one LED element (13) is arranged in the at least one base (12) of the
5 lamp.

9. The lamp as claimed in one of the preceding claims, characterized in that the bulb element is connected to the at least one base via a fixing region (28), and the at least one LED element is arranged 5 close to the fixing region.

10. The lamp as claimed in one of the preceding claims, characterized in that two or more LED elements (13) are provided which are arranged in the region of 10 the edge of the at least one base.

11. The lamp as claimed in one of the preceding claims, characterized in that two or more LED elements (13) are provided which are arranged on the base such 15 that they are distributed in the circumferential direction, in particular in the form of a circular ring.

12. The lamp as claimed in one of the preceding 20 claims, characterized in that two or more LED elements (13) are provided which comprise different colors.

13. The lamp as claimed in one of the preceding claims, characterized in that a diffuser element is 25 provided in addition to the bulb element (11).

14. The lamp as claimed in one of the preceding claims, characterized in that the bulb element (11) has an inner limit face (16) which is adjacent to the 30 physical volume (14) and an outer limit face (17) which is adjacent to the exterior, the inner and the outer limit faces being at least partially curved.

15. The lamp as claimed in one of the preceding 35 claims, characterized in that the LED light is passed on within the bulb element (11) along the limit faces (16, 17), in particular largely owing to total reflection on the two limit faces.

16. The lamp as claimed in one of the preceding claims, characterized in that the bulb element (11) is essentially hollow, two separate structural elements forming the inner and the outer limit faces.

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17. The lamp as claimed in one of the preceding claims, characterized in that an inner and/or an outer limit face (16, 17) of the bulb element (11) is provided with a fluorescent layer (32), which is 10 stimulated by the LED light, in particular LED radiation which is in the short-wave UV range..

18. The lamp as claimed in one of the preceding claims, characterized in that the lamp (10) has at 15 least one base (12) having a conventional physical shape.

19. The lamp as claimed in one of the preceding claims, characterized in that the bulb element (11) is 20 made of plastic.

20. The lamp as claimed in claim 19, characterized in that the plastic contains diffusers.

25 21. The lamp as claimed in claim 20, characterized in that the bulb element is in the form of a plastic injection-molded part, and the diffusers are mixed in with the plastic granulate prior to injection molding.

30 22. The lamp as claimed in claim 20, characterized in that the bulb element is in the form of a plastic injection-molded part, and the diffusers are part of the plastic granulate.

35 23. The lamp as claimed in one of claims 20 to 22, characterized in that the diffusers are made of fluorescent material.

24. The lamp as claimed in claim 23, characterized in that the fluorescent material converts UV light components, in particular the emissions in the blue or 5 long-wave UV range (for example Hg lines of a lamp element (31) of the second type) and/or the long-wave UV radiation emitted by the LED elements (13), into visible light.